

**REMARKS**

Reconsideration of the above-identified patent application is respectfully requested. In response to the Official Action, claims 1, 11, and 21 have been amended as set forth above. Support for the amendments may be found at page 5, lines 18 - 22, as well as at other places in the specification and drawings. New claims 24-34 are also added. Accordingly, claims 1, 4, 6, 10, 11, 13-19, and 21-34 are pending in the application.

The Examiner is respectfully requested to reconsider and withdraw the rejections of the present application.

Claims 1, 4, 11, 13-14, and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,727,135, hereinafter *Webb*, in view of U.S. Patent No. 5,937,148, hereinafter *Okazawa*. The Examiner alleges that *Webb* teaches a plurality of printers and a plurality of computers, each of which are connected to a print server.

The Examiner alleges that element 21 of *Webb* is a print server. As described in the present application at page 1, lines 14-16, and on page 5, lines 4-9, a "print server" provides some administrative function in controlling the flow of data between the various computers and printers. It is more than a connection between the printers and computers. See, e.g., the definitions of "print server" in the McGraw-Hill Dictionary of Electronics and Computer Technology; the Novell's Complete Encyclopedia of Networking; the Microsoft Press Computer Dictionary; and the IEEE Standard Dictionary of Electrical and Electronics Terms; copies of which are attached.

In contrast to the assertions made in the Official Action, the element 21 in *Webb* is merely a local area network, and is not a print server. As one of ordinary skill in the art would know, the local area network 21 is merely a communication channel used to transmit signals back and forth between a host computer 11 and a printer 16. See column 11, lines 1-10. The local area network 21 of *Webb* does not perform any administrative functions that might be associated with those of a print server, and is clearly not a print server. If the Examiner continues to maintain the position that the local area network 21 is a print server, the Examiner is requested to provide some support for this position, including identify what administrative functions are performed by the local are network 21.

In *Okazawa*, column 12, lines 1-4, reference is made to a hypothetical print server. However, even the hypothetical print server only obtains a status determination from a "corresponding printer" upon "reception of a command" (col. 12, lines 2-3) from an inquiring host computer. In such case, the status of the corresponding printer is sent only to the inquiring host computer, not to all of the computers. (Col. 12, lines 3-5).

Thus, there is no teaching in *Okazawa* of sending the status to a plurality of computers, as is required by claim 1.

The Examiner further states that *Webb* teaches that the status of the printers is sent simultaneously from the "print server" to each of the computers, citing col. 5, lines 1-5; col. 11, lines 1-10 and 19-23; and col. 12, lines 30-36. However, column 5 refers to displaying the status of multiple printers on the same host display. Column 11 does not support the Examiner's position, and column 12 simply refers to a Printer State Manager

140 in each printer. Thus, *Webb* does not teach that a particular status is sent to a plurality of host computers.

Accordingly, neither *Webb* nor *Okazawa* teaches or suggests the invention of claim 1, wherein a print server gathers the status of a plurality of printers and sends the gathered status to a plurality of computers.

Furthermore, claim 1 has been amended to define that the print server (which is connected to a plurality of printers and a plurality of computers) gathers the status of the plurality of printers and sends the gathered status to the plurality of computers. The LAN 21 in *Webb* has no capability of gathering data from the printers. The local area network 21 of *Webb* is merely a communication channel used to transmit signals back and forth between a host computer 11 and a printer 16. See column 11, lines 1-10. The local area network 21 of *Webb* does not perform any gathering function, and, as set forth above, is clearly not a print server.

Accordingly, the portions of the cited art relied upon by the Examiner do not teach the asserted portions of amended claim 1.

Furthermore, even if *Okazawa* was combined with *Webb*, the subject matter of claim 1 would still not be taught or suggested. For example, *Okazawa* teaches that, in response to receipt of printing data, or in response to an inquiry from the host computer, the status of a printer can be obtained. See step 11 in Figure 4 and the related description at column 7, lines 51-56. See also step 21 in Figure 5 and the related description thereof at column 8, lines 26-38. Specifically, *Okazawa* only teaches that the status of the printers is obtained upon receipt of printing data or a request from a host computer.

With regard to *Okazawa*, the Examiner relies upon column 11, line 57 through column 12, line 5. However, this designated section merely indicates that the printer server acquires the status of a corresponding printer and informs the status to *an* inquiring host computer. This section does not in any way relate to the sending of status of a plurality of printers to a plurality of computers. The Examiner further relies upon Figure 7, which displays the status. However, the displaying of the status is quite different than the sending of the status.

Accordingly, neither *Webb*, nor *Okazawa*, (or a combination of *Webb* and *Okazawa*) teaches or suggests the subject matter of claim 1, which includes, among other elements, a print server connected to a plurality of printers and a plurality of computers, wherein the print server includes a job observation module for monitoring and gathering the status of the plurality of printers connected to the print server, and sends the gathered status to the plurality of computers.

Furthermore, the requisite suggestion or motivation for the proposed combination of *Webb* and *Okazawa* is not understood, and is challenged. Specifically, since there is no server in *Webb*, how can it be modified? Furthermore, there is no "acquiring module" in *Okazawa*. *Okazawa* determines printer status only when requested to do so by an inquiring host computer. The Examiner is respectfully requested to set forth in greater detail how the proposed modification would work and to provide further details concerning the requisite motivation.

Applicant submits that the proposed combination is not adequately set forth, and is based solely on hindsight using the benefit of the Applicant's teachings. For example, only the Applicant teaches to gather the status of all printers and send it to all computers.

Accordingly, the Examiner is respectfully requested to withdraw the rejection of claim 1.

Claim 4 depends from claim 1, and is thus patentable over the combination of *Webb* and *Okazawa* at least for the reasons set forth above with respect to claim 1.

Claim 11 defines a method of controlling a print system that includes the steps of gathering a status of a plurality of printers with a print server; and sending the gathered status of the plurality of printers to a plurality of computers connected to the print server, the status being displayed at each of the plurality of computers.

As set forth above, *Webb* does not teach or suggest a print server connected to a plurality of printers and a plurality of computers. Furthermore, neither *Webb* nor *Okazawa* teaches the step of sending the gathered status of the plurality of printers to a plurality of computers. Accordingly, claim 11 is also not taught or suggested by the references cited by the Examiner.

Claims 13-14 depend from claim 11, and are thus also patentable over the prior art at least for the reasons set forth above with respect to claim 11.

Claim 22 defines a print server adapted to be connected to a plurality of printers and a plurality of computers, the print server comprising a job observation module for monitoring and gathering the status of the plurality of printers; and a device for notifying each of the plurality of computers of the gathered status of the plurality of printers. Claim

22 is patentable over the prior art at least for the reasons set forth above with respect to claim 11, i.e., the references do not teach the use of a print server for notifying each of the plurality of computers of the gathered status of a plurality of printers.

Claims 6 and 15-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of *Webb* and *Okazawa* as applied to claims 1 and 11, and further in view of U.S. Patent No. 5,669,040, issued to *Hisatake*. The Examiner relies upon the teaching of *Hisatake* only for allegedly teaching a waiting time for the printer which is displayed in the status monitor.

As set forth in the response filed in this application on September 24, 2001, Applicant explained that *Hisatake* also does not teach the monitoring of a waiting time for the printer. At best, *Hisatake* reveals the number of pages in a particular print job. However, given that each printer may print at a different speed, and that each page may take a different amount of time, *Hisatake* does not teach or suggest a waiting time for the print jobs. In the event that the Examiner maintains the rejection based on *Hisatake*, the Examiner is respectfully requested to more carefully point out how or why *Hisatake* teaches or suggests the waiting time for a printer.

Nevertheless, *Hisatake* does not overcome the deficiency of the rejection of the base claims based on *Webb* and *Okazawa*. Accordingly, claims 6 and 15-16 are also patentable over *Webb* and *Okazawa* and *Hisatake*.

Claims 17-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Webb* and *Okazawa*, as applied to claim 11, and further in view of U.S. Patent No. 6,213,652, issued to *Suzuki et al.* The Examiner relies upon *Suzuki et al.* for its alleged

teaching that the computers and print server exchange registration requests and response. Accordingly, *Suzuki et al.* does not overcome the deficiency of the rejection of the base claim based on *Webb* and *Okazawa*. Furthermore, Applicant reserves the right to challenge the Examiner's understanding of the alleged teachings of *Suzuki* at a later time, if necessary and appropriate.

Claims 10, 21, and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Webb*, and *Okazawa* as applied to the base claims, and *Hamazaki*.

The Examiner relies upon *Hamazaki* for its alleged teaching of a print server that includes means for calculating a waiting time for availability of a printer. Accordingly, *Hamazaki* does not overcome the deficiency of the rejection of the base claims based on *Webb* and *Okazawa*.

Furthermore, Applicant reserves the right to challenge the Examiner's allegations concerning the teachings of *Hamazaki* at a later time, if necessary and appropriate.

Accordingly, in view of the foregoing remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

To further define the protection to which Applicant is entitled, new claims 24-34 are added.

Claims 24 - 26 relate to the simultaneous transmission of the status data to the plurality of computers. As set forth above, contrary to the Examiner's position, *Webb* does not "simultaneously" transmit status to each of the computers. There is only a teaching (in *Okazawa*) of simultaneously displaying data of a plurality of printers on an inquiring computer. Accordingly, the new claims are also allowable.

The Examiner alleges that the print server (i.e., the LAN 21 in *Webb*) simultaneously sends the status of each of the printers to each of the computers. In support of this statement, the Examiner cites column 5, lines 1-5, column 11, lines 1-10 and 19-23, and column 12, lines 30-36. However, none of the cited portions support the Examiner's assertion that print status is *simultaneously* sent from the LAN 21 to each of the computers. Specifically, the Examiner's attention is directed to the fact that the Printer State Manager 140 in *Webb* is part of the microprocessor based controller 72 of the printer. See Figure 3 which illustrates that the Printer State Manager 140 is part of the microprocessor based controller 72. And, see column 9, lines 59-60, which indicates that the controller 72 is part of the printer. Accordingly, *Webb* does not teach or suggest a print server that simultaneously sends the status of the printers to each of the computers.

Claims 27 - 30 relate to a system the print server sends the status of the at least one printer to the plurality of computers when the status of the printer changes. And, claims 31 - 34 relate to a system the print server sends the status of the at least one printer to the plurality of computers without a status request from the computers. Accordingly, the new claims are also patentable over the applied prior art.



In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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**Attachment to Amendment dated April 23, 2002**

**Mark-up of Claims 1, 11, and 22**

1. (Twice Amended) A print system, comprising:
  - a print server;
  - a plurality of printers connected to the print server;
  - a plurality of computers connected to the print server;
  - the print server includes a job observation module for monitoring and  
gathering the status of the plurality of printers connected to the print server, and sends the  
gathered status to the plurality of computers; and
  - each of the computers includes a status monitor for displaying the status  
[which is sent simultaneously from the print server to each of the computers].
  
11. (Twice Amended) A method of controlling a print system, comprising the  
steps of:
  - gathering [obtaining] a status of a plurality of printers with a print server;
  - and
  - [simultaneously] sending the gathered [obtained] status of the plurality of  
printers to a plurality of computers connected to the print server, the status being displayed  
at each of the plurality of computers.

**Attachment to Amendment dated April 23, 2002**

**Mark-up of Claims 1, 11, and 22**

22. (Amended) A print server adapted to be connected to a plurality of printers and a plurality of computers, the print server comprising:

a job observation module for monitoring and gathering the status of the plurality of printers; and

a device for [simultaneously] notifying each of the plurality of computers of the gathered status of the plurality of printers.